

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

In the Matter of)	
)	
Global NAPs, Inc.)	
)	
Petition for Arbitration Pursuant to)	Docket No.: 02-0253
Section 252(b) of The)	
Telecommunications Act of 1996)	
to Establish an Interconnection)	
Agreement with Verizon North Inc. f/k/a)	
GTE North Incorporated and Verizon)	
South, Inc. f/k/a GTE South Incorporated.)	

Revised

Direct Testimony of

TERRY HAYNES

On Behalf of

Verizon North Inc. and
Verizon South Inc.

May 16, 2002

OFFICIAL FILE

I.C.C. DOCKET NO. 02-0253
Verizon Exhibit No. 3.0
Witness Haynes Revised
Date 6-11-02 Reporter C/C

1 **I. WITNESS BACKGROUND AND OVERVIEW**

2 **Q. Please state your name, business address, and position with Verizon.**

3 A. My name is Terry Haynes. My current business address is 600 Hidden Ridge, Irving,
4 Texas 75015. I am a manager in the State Regulatory Policy and Planning group
5 supporting the Verizon states formerly associated with GTE. I am testifying here on
6 behalf of Verizon South Inc. ("Verizon").

7 **Q. Please describe your educational and professional background.**

8 A. I received a Bachelor of Arts Degree in Philosophy from the University of South Carolina
9 in 1973. Since 1979, I have been employed by Verizon and its predecessor companies. I
10 have held positions in Operations, Technology Planning, Service Fulfillment and State
11 and Federal Regulatory Matters.

12 **Q. Please describe the purpose of your testimony.**

13 A. I will address Issues 3 and 4 presented in GNAPs' Petition for Arbitration, including the
14 disputed contract language. These issues, as stated in GNAPs Petition, are:

Issue No.	Statement of Issue	Disputed Contract Sections Related to Issue
Issue 3	"Should Verizon's local calling area boundaries be imposed on GNAPs or may GNAPs broadly define its own local calling area?"	Glossary §§ 2.34, 2.47, 2.56, 2.75, 2.83, 2.91; Interconnection Attachment §§ 2, 6.2, 7.1, 7.3.4 and 13.3.
Issue 4	"Can GNAPs assign to its customers NXX codes that are 'homed' in a central office switch outside of the local calling area in which the customer resides"	Glossary §§ 2.34, 2.47, 2.56, 2.75, 2.83, 2.91; Interconnection Attachment §§ 9.2 and 13.

15 **Q. Please summarize your testimony.**

16 A. With respect to Issue 3, Verizon agrees that GNAPs should remain free to define its retail
17 local calling areas as broadly as it likes. What GNAPs cannot do, however, is unilaterally
18 undermine Verizon's toll and access charge regime by defining the local calling area for
19 purposes of reciprocal compensation obligations. Verizon's tariffed local calling areas
20 should continue to be the basis for assessing reciprocal compensation. This is the
21 simplest and most competitively neutral approach.

22 With respect to Issue 4, is GNAPs is permitted to assign telephone numbers to end users
23 located outside of the rate center to which those numbers are homed, Verizon's proposed
24 contract language ensures that GNAPs cannot impermissibly alter the appropriate
25 intercarrier compensation by virtue of GNAPs' assignment of these "virtual NXX" codes.
26 Because GNAPs' virtual NXX traffic is not local in nature, reciprocal compensation does
27 not apply to this traffic.

28 II. ISSUE 3

29 **Q. What is the basis for defining reciprocal compensation obligations today?**

30 A. Interconnection contracts typically define reciprocal compensation obligations with
31 reference to the incumbent local exchange carrier's tariffed local exchange areas.
32 Verizon recommends maintaining this *status quo*, for the reasons I explain below.

33 **Q. What change does GNAPs propose?**

34 A. GNAPs contends that it "should be allowed to broadly define its own local calling area,
35 possibly as large as a single LATA." GNAPs Petition at 17; *see also* GNAPs' proposed
36 definitions of "Reciprocal Compensation Traffic," Glossary § 2.74; "Extended Local
37 Calling Scope Arrangement," Glossary § 2.34; "Measured Internet Traffic," Glossary §

2.56; “IXC (Interexchange Carrier),” Glossary § 2.47; and “Toll Traffic,” Glossary § 2.90. As noted, Verizon does not oppose allowing GNAPs to define its own retail local calling areas, but GNAPs seeks to determine reciprocal compensation obligations based on whether the originating carrier assesses toll charges on the customer originating the call. What this means, in practical terms, is that GNAPs could designate the entire LATA (or, for that matter, the entire nation) as its local calling area and avoid Verizon’s tariffed access charges that apply to intraLATA toll calls today. In addition, GNAPs would bill Verizon for reciprocal compensation for any Verizon-originated call that GNAPs terminated within the LATA (or whatever region GNAPs designated as a local calling area). This extreme proposal would have disastrous policy consequences.

Q. In that regard, what considerations should guide the Commission’s ruling on the local calling area for purposes of determining intercarrier compensation obligations?

A. The interconnection agreement’s designation of the local calling area for reciprocal compensation purposes must: (1) be competitively neutral, and (2) be administratively easy to implement. Continued use of Verizon’s Commission-approved local calling areas to define intercarrier compensation obligations serves these objectives. In contrast, none of these objectives will be met if the Commission adopts GNAPs’ proposal to allow the originating carrier to define the local calling area for intercarrier compensation purposes.

Q. What would be the chief consequence of adopting GNAPs’ proposal?

A. GNAPs’ proposal would obliterate the local/toll distinction reflected in Verizon’s tariffs and that this Commission has maintained for decades. This distinction is not simply a historical accident or anachronism.

61 What GNAPs proposes, in effect, is unilateral access *and* toll reform—that is, the
62 elimination of toll services for end users that call GNAPs' customers, thus taking toll
63 rates to zero. This proposal has repercussions far beyond the scope of this docket. If the
64 Commission wishes to consider the radical policy shift GNAPs proposes, it should do so
65 in a generic proceeding in which all interested parties can participate, rather than in an
66 arbitration between two parties.

67 **Q. Why isn't GNAPs' proposal competitively neutral?**

68 A. Defining the entire LATA as the local calling area, as GNAPs apparently intends to do,
69 would place Verizon and the interexchange carriers ("IXCs") at a competitive
70 disadvantage with regard to intraLATA toll calling. GNAPs' calls within the LATA
71 would be termed "local" and subject to reciprocal compensation. But an intraLATA call
72 that involves an IXC would still be subject to access compensation rules. Applying
73 different intercarrier compensation rules to the same type of calls would give GNAPs a
74 significant, artificial competitive advantage in pricing its intraLATA calls (regardless of
75 whether it deems them local calls or toll calls) versus pricing based on the cost structures
76 that the IXC and Verizon (through the Commission's imputation policy) face.

77 **Q. Please explain further how access charges are assessed on intraLATA calls today.**

78 A. Access charges are applied to intraLATA toll calls as between a local carrier and an IXC
79 and as between two local carriers.

80 For intraLATA toll calls carried by IXCs, the IXC pays the originating ILEC an
81 originating access charge (the major components of which are an end-office switching
82 charge, a transport charge, a carrier common line charge, an interconnection charge and a
83 tandem switching charge) and the IXC pays the terminating ILEC a similar terminating

access charge. In Verizon's territory, the net sum of originating and terminating charges averages about \$0.⁰²~~08~~ per minute, which the IXC recovers through its toll charges to its customer.

Q. Do these same access charge structures apply when a CLEC (rather than an ILEC) originates or terminates an IXC's intraLATA toll call?

A. Yes, access charges were developed to address compensation between all local exchange carriers and IXCs when those carriers collaborate to complete long distance calls. Verizon will bill the IXC access charges for whichever end of the call Verizon handles (originating or terminating). The CLEC, likewise, can be expected to charge the IXC an access rate for the other end of the call. The following table depicts the various end-user and intercompany charges for intraLATA toll that occur under today's set of rules:

Table 1
Compensation Between (1) ILECs or CLECs and (2) IXCs When They Collaborate
to Complete IntraLATA Toll Calls
(Current Rules)

<u>ILEC or CLEC</u> <u>Originating Call</u>	<u>IXC</u>	<u>ILEC OR CLEC</u> <u>Terminating Call</u>
Charges the IXC for originating access	Charges the end user for toll service	Charges the IXC for terminating access

Q. What happens today when there is no IXC involved, and the ILEC and CLEC collaborate to complete an intraLATA toll call?

A. When an ILEC and an CLEC collaborate to complete an intraLATA toll call (excluding toll free services such as 800/888), the following compensation flows apply:

Table 2
Compensation Between ILECs and CLECs When They Collaborate
to Complete IntraLATA Toll Calls
(Current Rules)

<u>ILEC Originating Call</u>	<u>CLEC Terminating Call</u>
Charges the end user for toll service	Charges the ILEC for terminating access

<u>CLEC Originating Call</u>	<u>ILEC Terminating Call</u>
Charges the end user for toll service	Charges the CLEC for terminating access

Q. Will GNAPs' proposal create new arbitrage opportunities?

A. Yes. GNAPs' approach enhances its opportunities to arbitrage Verizon's existing rate structures. Notice that when ILECs or CLECs collaborate with an IXC to complete long-distance calls under the LATA-wide reciprocal compensation scenario, the inter-company compensation with the IXC would be the same as it is now:

Table 3
Compensation Between (1) ILECs or CLECs and (2) IXC's When They Collaborate
to Complete IntraLATA Toll Calls
(LATA-wide Reciprocal Compensation Scenario)

ILEC or CLEC Originating Call	IXC	ILEC OR CLEC Terminating Call
Charges the IXC for originating access	Charges the end-user for toll service	Charges the IXC for terminating access

In contrast, when an ILEC and an CLEC collaborate to complete what was previously an intraLATA toll call (excluding toll free services such as 800/888), terminating access charges would be replaced with a reciprocal compensation charge (which is significantly less than access charges):

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Table 4
Compensation Between ILECs and CLECs When They Collaborate
to Complete IntraLATA Toll Calls
(LATA-wide Reciprocal Compensation Scenario)

<u>ILEC Originating Call</u>	<u>CLEC Terminating Call</u>
Charges the end-user for toll service	Charges the ILEC the reciprocal compensation rate
<u>CLEC Originating Call</u>	<u>ILEC Terminating Call</u>
Charges the end-user for toll service	Charges the CLEC the CLEC's reciprocal compensation rate

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The point is that competitive neutrality must be evaluated by looking at all the participants in the marketplace, not just a selected few. GNAPs' proposal ignores this simple fact. It would confer upon itself an artificial cost advantage because GNAPs, unlike the IXC's and the ILECs, would pay nothing. Nothing about GNAPs' proposal is competitively neutral.

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- Q. Does GNAPs' virtual NXX proposal further jeopardize competitive neutrality?**
- A.** Yes. Later, I address GNAPs' virtual NXX proposal in greater detail, but it is worth noting here that it exacerbates the competitive neutrality problems that I have identified with regard to GNAPs' originating carrier proposal. GNAPs' NXX proposal not only implies immediate access reform for any remaining intraLATA toll calls, but also, through the use of virtual NXXs, results in intraLATA toll calls being erroneously classified as local calls (through the use of originating and terminating NXX comparisons). Table 5 depicts the various intercompany compensations and end-user charges that occur under this scenario.

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Table 5
Compensation Between ILECs and CLECs When They Collaborate to
Complete IntraLATA Toll Calls Using Virtual NXXs
(LATA-wide Reciprocal Compensation Scenario)

<u>ILEC Originating Call</u>	<u>CLEC Terminating Call</u>
Call viewed as Local No end-user charges if local is flat-rated	Charges the ILEC the reciprocal compensation rate
<u>CLEC Originating Call</u>	<u>ILEC Terminating Call</u>
Call viewed as local Charges to end-users at the CLEC's discretion	Charges the CLEC the CLEC's reciprocal compensation rate

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In comparison with the LATA-wide scenario presented in Table 4, this scenario results in end users receiving intraLATA toll calls priced at zero. Under this scenario, the ILEC that originates an intraLATA toll call receives no additional revenues to cover the costs of that call. Although the ILEC receives no additional revenues, it continues to incur an additional cost for the CLEC that terminates the call, which further affects the ILEC's revenue requirement and, consequently, other ratepayers. The toll avoidance GNAPs proposes results in unilateral access avoidance to an even greater degree than has ever been contemplated in any access reform proceeding—because, if GNAPs' proposal is adopted, the ILEC's originating switched access rates are not even at *cost*, they are effectively equal to *zero*.

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It is obvious that competitive neutrality is eliminated through GNAPs' virtual NXX scheme, as no IXC can compete with a toll price of zero.

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Q. What other artificial competitive advantages would GNAPs obtain by defining the local calling area for reciprocal compensation purposes?

156 A. This approach is fraught with irrational outcomes. It could enable GNAPs to pay lower
157 reciprocal compensation rates for outbound traffic and receive higher access rates for
158 inbound traffic, or even a combination of the two.

159 A simple example will prove the unacceptable nature of GNAPs' proposal. Marion and
160 Sylva are not in the same Commission-approved Verizon local calling area. But under
161 GNAPs' originating carrier scenario, they could be in the same GNAPs local calling area.
162 In that situation, when a Verizon Marion subscriber called a GNAPs Sylva subscriber,
163 Verizon would be required to pay GNAPs access charges to terminate the call. However,
164 when a GNAPs customer in Sylva called a Verizon customer in Marion, GNAPs would
165 avoid paying Verizon's terminating access charges and instead pay only the lower
166 reciprocal compensation rate. Thus, for identical calls between Marion and Sylva,
167 GNAPs would collect a higher rate for calls from Verizon customers, but pay a lower rate
168 for calls originated by its customers.

169 This system would inevitably encourage gaming and produce aberrant incentives that do
170 not encourage widespread competition. GNAPs might, for example, target customers
171 with high inbound calling, in order to collect terminating access rates for its inbound
172 traffic (while paying Verizon the lower reciprocal compensation rate for calls between
173 the same points).

174 Basing intercarrier compensation on the originating carrier's local calling areas is plainly
175 inequitable. The direction of the call should play no part in the determining how
176 intercarrier compensation should be assessed.

177 Q. Is gaming a particular concern with regard to GNAPs?

178 A. Yes. Based on Verizon's considerable experience with GNAPs in some other states,
179 GNAPs' customer base appears to be largely limited to information service providers
180 ("ISPs") and perhaps some other set of customers with high volumes of incoming calls
181 and very few outgoing calls. This very limited focus causes me to view GNAPs in a
182 different light than a typical local carrier, and compels particular caution to avoid giving
183 GNAPs, by regulatory fiat, opportunities for gaming and arbitrage.

184 Q. **Are there also administrative problems associated with using the originating**
185 **carrier's retail local calling area for reciprocal compensation purposes?**

186 A. Yes. GNAPs' proposal is administratively infeasible, particularly when one considers
187 that it cannot be limited to the Verizon/GNAPs interconnection agreement. If GNAPs
188 convinces the Commission to accept its originating carrier proposal, GNAPs and other
189 carriers could each have one or more retail local calling areas, which they may change
190 any time virtually at will. Each CLEC, as well as Verizon, would have to attempt to track
191 these changes and build and maintain billing tables to implement each local calling area
192 and associated reciprocal compensation application. Administration is further
193 complicated if the local calling areas extends beyond LATA or state boundaries.

194 Aside from all the equity and policy reasons to reject GNAPs' proposal, in purely
195 practical terms, a uniform standard must be used to determine whether a call is subject to
196 the payment of reciprocal compensation or access charges. That standard has been and
197 should continue to be whether the call originates and terminates within Verizon's local
198 calling area; it brings the highest degree of competitive neutrality among ILECs, IXCs,
199 and CLECs when assessing access or reciprocal compensation.

200 Q. GNAPs claims that “many state Commissions have agreed with GNAPs’ position on
201 this issue.” (GNAPs Petition at 18). Is that true?

202 A. No. As support for its position on Issue 3, GNAPs cites a Florida Commission Staff
203 Memorandum and two California Commission decisions. (GNAPs Petition, n. 31).

204 GNAPs states that the Florida Commission Staff recommended LATA-wide reciprocal
205 compensation in the event parties’ are unable to negotiate the definition of local calling
206 area for reciprocal compensation purposes. GNAPs claims that “Staff’s position was
207 adopted in a Public Agenda Meeting, but has not yet been released in written form by the
208 Commission.” (GNAPs Petition, n. 31). This statement is false. The Commission did
209 not adopt its Staff’s recommendation. Instead, it ordered further hearings to more
210 carefully examine the most appropriate default local calling area for reciprocal
211 compensation purposes. That hearing was held on May 8—which GNAPs knows full
212 well because it is an active party in the proceeding.

213 The California Commission decisions GNAPs cites do not support its position, either.

214 Neither decision addressed the originating carrier proposal GNAPs advances here. The
215 September 1996 ruling did not state, as GNAPs claims, that “enhanced local calling area
216 offerings are technologically and economically efficient.” (GNAPs Petition, n. 31),

217 purportedly citing Order Instituting Rulemaking on the Commission’s Own Motion into
218 Competition for Local Exchange Service, Decision No. 99-09-029, Cal. PUC LEXIS 649

219 *25. Rather, it stated that the Commission would not prohibit carriers from assigning
220 virtual NXX codes “*where such an arrangement is technologically and economically*
221 *efficient, and where intercarrier compensation is fairly provided.*” *Id.* The

222 Commission also observed that “a carrier may not avoid responsibility for negotiating

223 reasonable intercarrier compensation for the routing of calls from the foreign exchange
224 merely by redefining the rating designation for toll to local, *id.* at *49, which is what
225 GNAPs seeks to do here.

226 GNAPs quotes the June 1996 California decision correctly, but it has nothing to do with
227 GNAPs' originating carrier proposal in this case. In establishing ground rules for local
228 competition, the California Commission merely affirmed that new entrants should be
229 permitted to establish their own local calling areas, just as ILECs should be given the
230 flexibility to propose their own optional local calling plans. Verizon, of course, does not
231 dispute these principles.

232 **Q. What has really been the trend in other states?**

233 A. The trend is the rejection of proposals that would circumvent the access charge regime.
234 For example, the Ohio Commission last week rejected the same proposal GNAPs makes
235 here, concluding that the ILECs' local calling areas "shall be used to determine whether a
236 call is local for the purpose of local traffic termination." *Petition of Global NAPs, Inc.*
237 *for Arbitration of Interconnection Rates, Terms, and Conditions and Related*
238 *Arrangements with United Telephone Company of Ohio d/b/a Sprint*, Case No. 01-2811-
239 TP-ARB and *Petition of Global NAPs, Inc. for Arbitration of Interconnection Rates,*
240 *Terms and Conditions and Related Arrangements with Ameritech Ohio*, Case No. 01-
241 3096-TP-ARB, Arbitration Award, at 11 (May 9, 2002). The Commission also explained
242 if a virtual NXX call terminates outside of the ILEC's local calling area, it is toll or
243 interexchange service subject to access charges. *Id.* at 8.

244 The Texas Public Utility Commission rejected the LATA-wide reciprocal compensation
245 approach (proposed there by AT&T), holding that the ILEC's mandatory local calling

246 areas were the appropriate basis for determining reciprocal compensation obligations.
247 The Commission correctly observed that the LATA-wide proposal implicated ILEC
248 access revenue streams and had “ramifications on rates for other types of calls, such as
249 intraLATA toll calls,” that were beyond the scope of a proceeding to address intercarrier
250 compensation for local traffic. *Proceeding to Examine Reciprocal Compensation*
251 *Pursuant to Section 252 of the Federal Telecomm. Act of 1996*, Arbitration Award, Tex.
252 P.U.C. Docket No. 21982, 2000 Tex. PUC Lexis 95; 203 P.U.R. 4th 419 (2000).

253 **III. ISSUE 4:**

254 **Q. Has Verizon proposed any contract language that would stop GNAPs from**
255 **assigning NXX codes that are homed to a central office outside of the customer’s**
256 **calling area?**

257 **A.** No. Again, GNAPs’ phrasing of the issue avoids focussing on the real dispute. Verizon
258 has not proposed to forbid GNAPs from assigning “virtual NXX” codes, which are not
259 associated with the rate center to which the code is homed. Rather, Verizon seeks to
260 ensure that GNAPs pays the appropriate compensation for these non-local, virtual NXX
261 calls. GNAPs’ virtual NXX proposal presents the same themes as its proposal to define
262 reciprocal compensation by reference to the originating carrier’s local calling area. It
263 would prevent Verizon from receiving the toll compensation and access charges it is
264 properly due under its Commission-approved tariffs. To add insult to injury, GNAPs
265 would bill Verizon for reciprocal compensation on virtual NXX traffic, claiming that it is
266 local—even though these calls do not originate and terminate within the same local
267 calling area. So GNAPs would get a free ride for its toll traffic on Verizon’s interoffice

network *and* get paid, through reciprocal compensation, for local termination costs it does not incur.

Again, Verizon's position on this issue is not rooted in any desire to protect itself from competition. The same comments I made above with regard to Issue 3 apply equally here; GNAPs completely disregards the relationship between the local/toll distinction and the Commission's longstanding policy objectives, just as it ignores the constraints on Verizon's pricing. GNAPs is openly seeking an artificial competitive advantage and enhanced opportunities for regulatory gaming.

Q. Before discussing the "virtual FX" issue further, please define the terms relevant to the discussion.

A. Several terms and concepts discussed in my testimony, though commonly used, are often misapplied or misunderstood. As a foundation for understanding the virtual NXX discussion, I use the following definitions:

An "**exchange**" is a geographical unit established for the administration of telephone communications in a specified area, consisting of one or more central offices together with the associated plant used in furnishing communications within that area.

An "**exchange area**" is the territory served by an exchange.

A "**rate center**" is a specified location (identified by a vertical and horizontal coordinate) within an exchange area, from which mileage measurements are determined for the application of toll rates and private line interexchange mileage rates.

290 An “NPA,” commonly known as an “area code,” is a three-digit code that
291 occupies the first three (also called “A”, B and C”) positions in the 10-digit
292 number format that applies throughout the North American Numbering Plan
293 (“NANP”) Area, which includes all of the United States, Canada, and the
294 Caribbean islands. There are two kinds of NPAs: those that correspond to
295 discrete geographic areas within the NANP Area, and those used for services with
296 attributes, functionalities, or requirements that transcend specific geographic
297 boundaries (such as NPAs in the N00 format, e.g., 800, 500, etc.).¹

298 An “**exchange code**” is a three-digit code—also known as an “NXX,” an “NXX
299 code,” a “central office code” or a “CO code”—that occupies the second three
300 (“D, E and F”) positions in the 10-digit number format that applies throughout the
301 NANP Area.² Exchange codes are generally assigned to specific geographic
302 areas. However, some exchange codes are non-geographic, such as “N11” codes
303 (411, 911, etc.) and “special codes” such as “555.” An exchange code that is
304 geographic is assigned to an exchange located, as previously mentioned, within an
305 area code.

306 When a four-digit line number (“XXXX”) is added to the NPA and exchange
307 code, it completes the 10-digit number format used in the NANP Area and
308 identifies a specific customer located in a specific exchange and specific state (or

¹See “NPA” in the *Glossary of the “Central Office Code (NXX) Assignment Guidelines,”* INC 95-0407-008, April 11, 2000.

²See “exchange code” in the *Glossary of the “Central Office Code (NXX) Assignment Guidelines,”* INC 95-0407-008, April 11, 2000.

portion of a state, for those states with multiple NPAs). This 10-digit number is also known as a customer's unique telephone number or "address."³

Q. Why is a customer's 10-digit "address" significant?

A. A customer's telephone number or "address" serves two separate but related functions: proper call routing and rating. Each exchange code or NXX within an NPA is typically assigned to *both a switch*, identified by the Common Language Location Identifier ("CLLI"), *and a rate center*. As a result, telephone numbers provide the network with specific information (*i.e.*, the called party's end office switch) necessary to route calls correctly to their intended destinations. At the same time, telephone numbers traditionally also have identified the exchanges of both the originating caller and the called party to provide for the proper rating of calls—*i.e.*, the determination whether and how much the calling party should be billed for a call.

Q. Can you explain the basic principles governing the manner in which customers are charged for the calls that they make?

A. Yes. One basic principle is the distinction between local calls and toll calls. The basic telephone exchange service rate typically includes the ability to make an unlimited number of calls within a confined geographic area at modest or no additional charge. This "confined geographic area" consists of the customer's "home" exchange area and additional surrounding exchanges, together designated as the customer's "local calling

³See "NANP" in the *Glossary of the "Central Office Code (NXX) Assignment Guidelines,"* INC 95-0407-008, April 11, 2000.

area.” Calls outside the local calling area, with limited exceptions noted in the paragraph below, are subject to an additional charge, referred to as a “toll” or Message Telecommunications Service (“MTS”) charge. “Toll” service is generally priced at higher rates, on a usage-sensitive basis, than local calling. As I explained earlier, the local/toll distinction is rooted in the decades-old public policy goal of assuring the widespread availability of affordable telephone service.

A second industry pricing convention is the principle that, generally, the calling party pays to complete a call—with no charge levied on the called party. There are a few exceptions, such as where a called party agrees to pay toll charges in lieu of applying those rates on the calling party (*e.g.*, 800/877/888-type “toll-free” service, “collect” and third-party billing, and Foreign Exchange or “FX” services).

Q. How does the telephone number or “address” play a role in rating an individual call?

A. LECs’ retail tariffs and billing systems use the NXX codes of the calling and called parties to ascertain the originating and terminating rate centers/exchange areas of the call. This information, in turn, is used to properly rate the call for purposes of billing the calling party. If the rate center/exchange area of the called party, as determined by the called number’s NXX code, is included in the originating subscriber’s “local calling area,” then the call is established as a “local” call. If the rate center/exchange area of the called party—again determined by the NXX code of the called number—is outside the local calling area of the caller, then the call is determined to be “toll.” Thus, the rate centers of calling and called parties, as expressed in the unique NXX codes typically

350 assigned to each rate center/exchange area, enable LECs to properly rate calls as either
351 local or toll.

352 **Q. What is a “virtual NXX”?**

353 A. Whenever a CLEC assigns a customer a telephone number with an NXX code designated
354 by the carrier for a rate center/exchange area other than the one in which its customer is
355 physically located, such an NXX is called a “virtual NXX.” Indeed, the carrier may
356 obtain an entire exchange code solely for the purpose of designating it for a rate
357 center/exchange area in which the carrier has no customers or customers of its own or
358 facilities to serve any customers. Instead, the CLEC uses the exchange code for the sole
359 purpose of assigning telephone numbers to its end users physically located in exchanges
360 other than the one to which the code was assigned.

361 **Q. How does the existence of virtual NXX service affect either the routing or rating of**
362 **telephone calls?**

363 A. A CLEC’s assignment of numbers to end users not physically located in the exchange
364 area associated with that NXX does *not* affect the routing of the call from the caller to the
365 called party. The ILEC’s network recognizes the carrier-assigned NXX code and routes
366 the call to that carrier’s switch for delivery by the carrier to its end user, the called party.
367 The NXX assignment does, however, affect the rating of the call. The CLEC typically
368 assigns virtual NXX codes to customers that are expected to receive a high volume of
369 incoming calls from ILEC customers within the exchange of that NXX, and the CLEC’s
370 virtual NXX arrangement allows such calls to be made without a toll charge on the
371 calling party. In one common arrangement, a CLEC allows an ISP to collocate with its

switch, and then assigns that ISP telephone numbers associated with every local calling area within a broad geographic area—a LATA, or an entire state. The ISP would then be able to offer all of its subscribers a locally rated access number without having to establish more than a single physical presence in that geographic area. If the ISP had been assigned an NXX associated with the calling area in which it is located, many of those calls would be rated as toll calls.

Q. Have NXX codes traditionally been used to govern inter-carrier compensation?

A. No. Any argument to the contrary confuses the rating of calls for the purpose of assessing end-user charges and treatment of calls for intercarrier compensation purposes. Before the widespread introduction of local competition following the adoption of the 1996 Act, the most important type of intercarrier compensation were the access charges that interLATA long distance carriers paid to local telephone companies. Such inter-carrier compensation has always been governed by the originating and terminating points of the end-to-end call, not the NPA-NXX of the calling and called party.

For example, AT&T has offered customers interLATA FX service, described by the FCC as one “which connects a subscriber ordinarily served by a local (or “home”) end office to a distant (or “foreign”) end office through a dedicated line from the subscriber’s premises to the home end office, and then to the distant end office.” *AT&T Corp. v. Bell Atlantic-Pennsylvania*, 14 FCC Rcd 556, 587, ¶ 71 (1998) (“*AT&T v. BA-PA*”), *reconsideration denied*, 15 FCC Rcd 7467 (2000). An airline with a reservation office in Atlanta could provide customers in Bloomington a locally rated number, but all calls would still be routed to Atlanta. The FCC ruled, in that situation, that AT&T was required to pay access charges for the Bloomington end of that call—even though the call

395 was locally rated for the caller, because AT&T was still using access service to complete
396 an interLATA call to the called party. *Id.* at 590, ¶ 80. The fact that the calling party and
397 the called party were assigned NPA-NXX's in the same local calling area was totally
398 irrelevant to the proper treatment of the call for intercarrier compensation purposes.

399 Another example is "Feature Group A" access, one method that interexchange carriers
400 ("IXCs") use to gain access to the local exchange. In that arrangement, the caller first
401 dials a seven-digit number to reach the IXC, and then dials a password and the called
402 party's area code and number to complete the call. Notwithstanding this dialing
403 sequence, the service the LEC provides is considered *interstate* access service, not a
404 separate local call, and the IXC must pay access charges.

405 **Q. Does the principle that intercarrier compensation is governed by the originating and**
406 **terminating points of the end-to-end communication apply to reciprocal**
407 **compensation?**

408 **A.** Yes. The FCC has always held that reciprocal compensation does not apply to
409 interexchange traffic, whether interstate or intrastate, but only to traffic that remains
410 within a single local calling area. The FCC confirmed this in its April 2001 *ISP Remand*
411 *Order*,⁴ when it ruled that reciprocal compensation does not apply to "exchange access,
412 information exchange access, or exchange services for such access." 47 C.F.R.
413 § 51.701(b)(1). As the FCC has made clear, this includes all "provision of exchange

⁴ Order on Remand and Report and Order, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 16 FCC Rcd 9151 (2001) ("ISP Remand Order"), remanded, *WorldCom, Inc. v. FCC*, No. 01-1218 (D.C. Cir. May 3, 2002). Although the D.C. Circuit remanded the *ISP Remand Order* to permit the FCC to clarify its reading, it left the order in place as governing federal law. See *WorldCom, Inc. v. FCC*, No. 01-1218, slip op. at 5 (D.C. Cir. May 3, 2002).

services for the purpose of originating or terminating interexchange telecommunications.” *ISP Remand Order* at ¶ 37 n.65. Whether a particular call is interexchange does not depend on the telephone number, it depends on whether the call remains within the local calling area or travels outside it.

Q. Is virtual NXX traffic interexchange?

A. Yes. There can be no dispute that virtual NXX traffic involves interexchange telecommunications. In such an arrangement, a caller located in one local calling area places a call to a called party located in a different local calling area. The manner in which the called party’s carrier assigns telephone numbers cannot change that fact, even though it does change the billing consequences for the calling party.

Q. Will enforcing the FCC’s reciprocal compensation rules with respect to virtual NXX traffic impede competition?

A. No. Enforcing the FCC’s rules will promote competition, not impede it. GNAPs will remain free to market its virtual NXX service and receive whatever compensation for that service that its end-users are willing to pay. But Verizon should not be required to subsidize that service by paying reciprocal compensation on traffic that is interexchange. In other words, Verizon’s local customers should not have to defray the costs of providing this service to end users who are located outside the exchange. Enforcing the rules will simply prevent GNAPs from exploiting a potentially lucrative regulatory arbitrage opportunity, to the detriment of competition.

Q. Do you agree that it is proper for GNAPs to assign virtual NXX codes to its customers?

436 A. As I noted at the beginning of my discussion of this issue, GNAPs' ability to assign
437 virtual NXX codes is not really at issue here, although preventing such assignments
438 would avoid all of the problems I've identified. Rather, Verizon wants to ensure that the
439 parties' agreement does not require payment of reciprocal compensation for any
440 interexchange traffic, including virtual NXX calls. Such calls are not subject to
441 reciprocal compensation under the FCC's rules.

442 Verizon believes that the issue of GNAPs' ability to assign virtual NXX codes will
443 become a moot point if the Commission rejects GNAPs' position on compensation
444 relative to use of these numbers. That is, if GNAPs must bear the costs it causes in
445 making NXX assignments, and it must pay appropriate compensation for such calls, then
446 GNAPs will have no interest in making virtual NXX assignments.

447 **Q. Do you have any other concerns about "virtual NXX" traffic?**

448 A. Yes. Another concern is related to interconnection architecture. In this proceeding,
449 GNAPs is insisting that it has a right to interconnect with Verizon at any point within a
450 LATA and require Verizon to bear the cost of transporting traffic to that point of
451 interconnection.

452 CLECs' use of virtual NXXs makes calls appear local that are actually toll service from
453 the Verizon customer's physical location to the CLEC customer's physical location,
454 thereby denying Verizon the opportunity to collect appropriate compensation for the
455 transport it provides to the CLECs on the call. When an ILEC's customer initiates a call
456 to a CLEC virtual NXX, the ILEC's switch sees the NXX code as being assigned to the
457 exchange area/rate center of the originating caller or to an exchange area within the
458 originating caller's local calling area and, therefore, does not rate the call as a toll call. In

fact, the call is delivered by the CLEC to its end user located *outside* the local calling area of the originating customer. In this situation, toll charges properly apply and would be assessed save for the assignment of virtual NXX codes. The CLEC, however, does not terminate the call within the local calling area of the originating caller. Rather, the CLEC simply takes the traffic delivered to its switch and delivers the calls to its virtual NXX subscriber, often located in the same exchange as its switch—if not physically collocated with the CLEC at its switch.

In short, the CLEC gets a free ride for interexchange traffic on the incumbent's interoffice network. Verizon incurs essentially all of the transport costs, yet is denied an opportunity to recover its costs either from its originating subscriber or from the CLEC. GNAPs, on the other hand, is compensated by its own customer for the receipt of these calls, just as an ILEC is compensated for providing a customer a traditional FX arrangement, and just as a long distance carrier is compensated for providing a customer a toll-free number. It does not make sense to require the calling party to bear the costs of this arrangement, but that is what GNAPs is seeking to achieve.

There can be little doubt why some CLECs have embraced virtual NXX service to the exclusion of other service arrangements. GNAPs should bear the cost of transporting the traffic that it receives from Verizon beyond the local calling area where that traffic originated. But GNAPs has refused to accept an agreement that would require GNAPs to bear these transport costs. Interconnection architecture issues are discussed in greater detail in the testimony of Mr. Peter D'Amico.

Q. Do you agree with GNAPs that virtual NXX service allows customers to take advantage of technological advances (GNAPs Petition at 20)?

482 A. No. Virtual NXX arrangements are hardly a state-of-the-art technology and are certainly
483 not necessary to provide customers toll-free calling. Telephone companies have been
484 offering toll-free service for more than 20 years. The fact is that the CLEC number
485 assignment action causes originating ILECs like Verizon to treat the call at the
486 originating switch as a local call for end-user billing and switch routing purposes. This is
487 much like how Verizon would transport a toll call or an originating access call—existing
488 services for which Verizon would be compensated by the originating toll user or the
489 interexchange access customer, respectively. The only thing that’s “new” here is the new
490 scheme to manipulate intercarrier transport and compensation in a manner to shift the
491 costs of providing this toll-free number service to the originating ILEC. There is no
492 aspect of the virtual NXX service that would be considered new or state-of-the-art from a
493 technological perspective.

494 **Q. Has the Commission addressed this issue in the past?**

495 A. Yes. In the recent arbitration between Ameritech Illinois and GNAPs,⁵ the Commission
496 ruled that if GNAPs interconnects with Ameritech at any point outside of Ameritech’s
497 local calling area, GNAPs should be required to compensate Ameritech for, or otherwise
498 be responsible for, transport beyond the local calling area. As I have noted above, the
499 requirement that a carrier bear responsibility for transporting all calls that originate on
500 Verizon’s network outside Verizon’s local calling area alleviates one significant concern
501 associated with virtual NXX arrangements.

⁵ *GNAPS Petition for Arbitration pursuant to Section 252 of the Telecommunications Act of 1996 to establish an interconnection agreement with Illinois Bell Telephone Company d/b/a Ameritech*, Docket 01-0786.(May. 14, 2002).

502 In that same docket, the Commission also issued an initial ruling that calls *within a LATA*
503 originated by Ameritech's customers to GNAPs foreign exchange customers are to be
504 considered local for reciprocal compensation purposes.⁶ I do not believe that requiring
505 carriers to pay reciprocal compensation for virtual NXX traffic is consistent with the
506 FCC's rules, or with this Commission's other policies.

507 **Q. Would Verizon's position restrict GNAPs' ability to offer this service or reduce its**
508 **utility to GNAPs' customers?**

509 A. No. GNAPs could offer the same virtual NXX service to its customers. But GNAPs
510 could not collect reciprocal compensation for such traffic—compensation to which it has
511 no right under the FCC's rules.

512 **Q. Have other state commissions addressed this issue?**

513 A. Yes. The Florida Commission, for example, has confirmed that virtual NXX traffic is not
514 local, and is thus not subject to reciprocal compensation, because it does not physically
515 terminate in the same ILEC local calling area in which it originates.⁷ Although the
516 Florida Commission ruled that CLECs may assign telephone numbers to end users
517 physically outside the rate center to which a telephone number is homed,⁸ it agreed with
518 its Staff's conclusion that compensation for traffic depends on the end points of the call—

⁶ *Id.*

⁷ See Staff Memorandum, *Investigation into Appropriate Methods to Compensate Carriers for Exchange Carriers for Exchange of Traffic Subject to Section 251 of the Telecommunications Act of 1996*, Docket No. 000075-TP ("Reciprocal Compensation Recommendation"), Issue 15 at 69, 71, 96 (Florida PUC Nov. 21, 2001), approved at Florida PUC Agenda Conference (Dec. 5, 2001).

⁸ *Id.* at 90-96.

519 that is, where it physically originates and terminates—not on “the NPA/NXXs assigned
520 to the calling and called parties.”⁹

521 Other state commissions have barred the use of virtual NXX arrangements altogether out
522 of concern over regulatory arbitrage. For example, in an arbitration between Focal
523 Communications and the former Bell Atlantic-Pennsylvania, the Pennsylvania
524 Commission reiterated its “*MFS II* directive that requires assignment of [a CLEC’s]
525 customers’ telephone numbers with NXX codes that correspond to the rate centers in
526 which the customers’ premises are physically located.”¹⁰ In *MFS II*, that Commission
527 had explained its rationale as follows:

528 [E]ach CLEC must comply with BA-PA’s local calling areas. This
529 is imperative to avoid customer confusion and to clearly and fairly
530 prescribe the boundaries for the termination of a local call and the
531 incurrence of a transport or termination charge, as opposed to
532 termination of a toll call in which case an access charge would be
533 assessed.¹¹

534 The Commission had addressed this issue in somewhat more detail in its initial ruling in
535 the Focal Communications proceeding:

536 With regard to BA-PA’s argument that Focal escapes any
537 obligation to pay for the use of BA-PA’s transport network by
538 assigning its customers telephone numbers with NXXs that
539 misrepresent the actual locations of those customers, we agree with
540 Focal that the alleged transport concerns raised by BA-PA are
541 irrelevant in this proceeding because they are advanced as

⁹*Id.* at 88-89.

¹⁰Opinion and Order, *Petition of Focal Communications Corp. of Pennsylvania for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Bell Atlantic-Pennsylvania, Inc.*, Docket No. A-310630F0002, at 10-11 (Pa. PUC Jan. 29, 2001).

¹¹*Pennsylvania Pub. Util. Comm’n v. Bell Atlantic-Pennsylvania, Inc.*, R-00974176, *et al.*, 1998 WL 191237, *4 (Pa. PUC Feb. 5, 1998).

542 examples under an existing interconnection agreement between
543 BA-PA and Focal, and not under the agreement that is being
544 arbitrated. (FocalRExc., p. 17). At the same time, however, we
545 are of the opinion that if the allegations by BA-PA concerning any
546 abuse by Focal in assigning telephone numbers to customers using
547 NXX codes that do not correspond to the rate centers in which the
548 customers' premises are physically located are true, then we
549 admonish Focal to comply with the directives in our MFS II Order
550 and to refrain from this practice. At any rate, it is more appropriate
551 to address the specifics of violation issues in a separate
552 proceeding.¹²

553 **Q. Are you aware of any other state commissions that have addressed the issue of**
554 **assignment of telephone numbers to end users located outside of the rate center to**
555 **which they are homed?**

556 **A.** Yes. For example, on June 30, 2000, the Maine Public Utility Commission ordered a
557 CLEC, Brooks Fiber, to return 54 NXX codes which it was using in a "virtual NXX"
558 capacity and rejected Brooks' proposed "virtual NXX" service. The Commission found
559 that Brooks had no facilities deployed in any of the locations to which the 54 NXX codes
560 were nominally assigned. As such, it rejected Brooks' arguments that it was using the
561 codes to provide local service, and concluded that Brooks' activities had "nothing to do
562 with local competition."¹³ It found that Brooks' "extravagant" use of the 54 codes
563 "solely for the rating of interexchange traffic" was patently unreasonable from the

¹²Opinion and Order, *Petition of Focal Communications Corp. of Pennsylvania for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Bell Atlantic-Pennsylvania, Inc.*, Docket No. A-310630F0002, at 43 (Pa. PUC Aug. 17, 2000) (citations omitted) (emphasis added).

¹³*Investigation Into Use of Central Office Codes (NXXs) by New England Fiber Comm., LLC d/b/a Brooks Fiber, etc., Order Requiring Reclamation of NXX Codes and Disapproving Proposed Service*, Docket Nos. 98-758 & 99-593, at 13 Tab 1 (Maine PUC June 30, 2000)

standpoint of number conservation.¹⁴ The Commission further observed that Brooks' likely reason for attempting to implement an "FX-like" service, instead of a permissible 800 or equivalent service, was Brooks' "hope that it might avoid paying Bell Atlantic for the interexchange transport service provided by Bell Atlantic."¹⁵

Q. Does the FCC's *ISP Remand Order* alleviate Verizon's concerns with virtual NXX?

A. The FCC's *ISP Remand Order* addresses only termination rates, and only with regard to Internet-bound traffic. It does not resolve lost toll revenue and transport cost issues associated with "virtual NXX" assignments. As I previously explained, these issues are not limited to Internet-bound traffic and are not directly related to termination rates. "Virtual NXX" assignment shifts transport costs to Verizon and makes toll calls to which toll charges properly apply appear as though they are local calls.

Q. GNAPs claims that the ILECs foreign exchange (FX) service is "essentially a virtual NXX service." (GNAPs Petition at 21). Is that true?

A. No. While the two services are functionally alike from the calling party's perspective, the similarity ends there.

Verizon's FX service is a toll substitute service. It is essentially a private line service designed so that a calling party in the "foreign" exchange may place to the FX customer, located outside the caller's local calling area, what *appears* to be a local call. But if FX service were truly a local call, the called party would not be subject to additional charges. The called party (the FX subscriber), however, agrees to pay (on a flat-rate basis) the

¹⁴*Id.* at 16.

¹⁵*Id.* at 12.

584 additional charges which the calling party would otherwise have to pay to transport the
585 call beyond the caller's local calling area to the exchange where the FX customer's
586 premises are located. FX service has existed for decades as a way for a customer to give
587 the appearance of a presence in another local calling area—for example, in the local
588 calling area of its potential customers for an FX business customer. The FX customer
589 does so by subscribing to basic exchange service from the “foreign” switch and having its
590 calls from that local calling area transported over either a dedicated or shared line, *which*
591 *it also pays for*, from the distant local calling area to its own premises. En route, the call
592 is transported through the FX customer's own end office where it is connected to the
593 customer's local loop.

594 When CLECs provide virtual NXX service, however, the ILEC handling the virtual NXX
595 traffic is not compensated for transporting calls to a rate center outside the normal local
596 calling scope. Unlike real FX service, virtual NXX forces the originating carrier to bear
597 the financial burden of the terminating caller's decision to provide a virtual NXX service.
598 Instead, as I explained earlier, it tricks Verizon PA's billing systems into rating the call as
599 local, rather than toll. In addition, for FX service, the end user customer compensates
600 Verizon for the ability to receive calls from only *one* other rate center. If a customer
601 chose to have FX service from all of the rate centers within a LATA, his total monthly
602 FX charges would be correspondingly much greater (in order to compensate Verizon for
603 transporting the traffic outside of the local calling area from across the LATA).

604 **Q. How does Verizon recommend the Commission resolve this issue?**

605 A. The Commission should adopt Verizon's proposed contract language, making clear that
606 reciprocal compensation does not apply to any traffic that is interexchange, defined by
607 reference to the actual originating and terminating points of the complete end-to-end call.

608 **Q. Does this conclude your testimony?**

609 A. Yes.